ABSTRACT OF DISCLOSURE

Disclosed is a composition for inhibiting glutamate-mediated neurotoxicity comprising 20(S)-ginsenoside Rg₃, 20(S)-ginsenoside Rh₂ or the mixture of 20(S)-ginsenoside Rg₃ and 20(S)-ginsenoside Rh₂. The composition of the present invention has an excellent neurotoxicity inhibition effect or nerve cell protection effect. Accordingly, it can be effectively used for treating nervous diseases including cerebral trauma, cerebral apoplexy, cerebral hemorrhage; epilepsy occurred by excessive activation of glutamate receptors; or Huntington's disease.